BUILDING STANDARDS COMMISSION
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March 25, 2014

David Chantarangsu
Community Development Director
City of Laguna Hills
24035 El Toro Road
Laguna Hills, CA 92653

RE: Ordinance #2013-3

Dear Mr. Chantarangsu:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your agency on March 6, 2014.

Our review finds the submittal to contain one ordinance modifying provisions of the 2013 California Building Standards Code in Title 24, California Code of Regulations (code), and express findings complying with Health and Safety Code §§17958.7 and 18941.5. The code modification is accepted for filing and is enforceable. This letter attests only to the satisfaction of the cited law for filing of local code amendment supported by an express finding with the Commission. The Commission is not authorized by law to evaluate the merit of the code modification or the express finding.

Local modifications to the code are specific to a particular edition of the code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the code is published.

On a related matter, should your city receive and ratify Fire Protection District ordinances making modifications to the code, be advised that Health and Safety Code §13869.7(c) requires such ratified ordinances and express findings to be filed with the Department of Housing and Community Development, Division of Codes and Standards, State Housing Law Program, rather than this Commission. Also, ordinances making modifications to the energy efficiency standards of the code may require approval from the California Energy Commission pursuant to Public Resources Code §25402.1(h)(2).

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings

O'Brien, Laurie@DGS

From: David Chantarangsu <DChantarangsu@ci.laguna-hills.ca.us>
Sent: Thursday, March 06, 2014 9:05 AM
To: OrdinanceFilings@DGS
Subject: Filing of Local Amendments to the Building Standards Code - City of Laguna Hills
Attachments: 2013-3.pdf

To Whom It May Concern:

Pursuant to Section 17958.7(a) of the Health and Safety Code, the City of Laguna Hills is transmitting local amendments made to the Building Standards Code during the 2013 adoption cycle. Should you have any questions please feel free to contact me.

Best regards.

David Chantarangsu, AICP
Community Development Director
City of Laguna Hills
24035 El Toro Road
Laguna Hills, CA 92653
Direct: (949) 707-2675
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ORDINANCE NO. 2013-3

AN ORDINANCE OF THE CITY OF LAGUNA HILLS, CALIFORNIA AMENDING TITLE 10 OF THE LAGUNA HILLS MUNICIPAL CODE BY AMENDING CHAPTERS 10-28, 10-32, 10-36, 10-40, 10-48 AND 10-52 ADOPTING BY REFERENCE THE CALIFORNIA BUILDING STANDARDS CODE (CALIFORNIA CODE OF REGULATIONS, TITLE 24), CONSISTING OF THE CALIFORNIA BUILDING CODE (AS AMENDED), 2013 EDITION, BASED ON THE 2012 INTERNATIONAL BUILDING CODE AS PUBLISHED BY THE INTERNATIONAL CODE COUNCIL; THE CALIFORNIA MECHANICAL CODE, 2013 EDITION, BASED ON THE 2012 UNIFORM MECHANICAL CODE AS PUBLISHED BY THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS; THE CALIFORNIA ELECTRICAL CODE, 2013 EDITION, BASED ON THE 2011 NATIONAL ELECTRICAL CODE AS PUBLISHED BY THE NATIONAL FIRE PROTECTION ASSOCIATION; THE CALIFORNIA PLUMBING CODE, 2013 EDITION, BASED ON THE 2012 UNIFORM PLUMBING CODE AS PUBLISHED BY THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS; THE CALIFORNIA RESIDENTIAL CODE (AS AMENDED), 2013 EDITION, BASED ON THE 2012 INTERNATIONAL RESIDENTIAL CODE AS PUBLISHED BY THE INTERNATIONAL CODE COUNCIL; AND THE CALIFORNIA GREEN BUILDING STANDARDS CODE (AS AMENDED), 2013 EDITION; AND AMENDING TITLE 10, CHAPTER 10-44 OF THE LAGUNA HILLS MUNICIPAL CODE BY ADOPTING BY REFERENCE THE INTERNATIONAL SWIMMING POOL AND SPA CODE (AS AMENDED), 2012 EDITION, AS PUBLISHED BY THE INTERNATIONAL CODE COUNCIL

WHEREAS, pursuant to California Government Code Section 50022.1 *et seq.*, the City of Laguna Hills ("City") may adopt by reference the California Building Standards Code, 2013 Edition, as provided in Title 24 of the California Code of Regulations; and

WHEREAS, the California Building Standards Commission ("Commission") recently adopted new amendments to the California Building Standards Code; and

WHEREAS, California Health & Safety Code Section 17958.5 *et seq.*, and 18941.5 authorizes cities to modify the California Building Standards Code by adopting more restrictive standards and modifications if such standards and modifications are

accompanied by express findings that they are reasonably necessary because of local climatic, geological or topographical conditions; and

WHEREAS, based upon the recommendations of the Building Official, the City Council finds the proposed amendments to the 2013 California Building Standards Code ("amendments") set forth in this ordinance, which are more restrictive than the standards adopted by the California Building Standards Commission, would decrease the potential incidence of property damage, injury, and death due to fires and earthquakes, and are reasonable and necessary to mitigate local climatic, geological or topographical conditions; and

WHEREAS, on November 12, 2013, the City introduced this Ordinance for first reading at a regular meeting of the City Council, and set a public hearing and second reading of the Ordinance for December 10, 2013; and

WHEREAS, the City held a public hearing on December 10, 2013, at which time all interested persons had the opportunity to appear and be heard on the matter of adopting the 2013 California Building Standards Code as amended herein, as well as, the adoption of the 2012 International Swimming Pool and Spa Code; and

WHEREAS, pursuant to California Government Code Section 6066, the City published notice of the aforementioned public hearing; and

WHEREAS, any and all other legal prerequisites relating to the adoption of this Ordinance have occurred;

THE CITY COUNCIL OF THE CITY OF LAGUNA HILLS, CALIFORNIA, DOES ORDAIN AS FOLLOWS:

SECTION 1. Findings. The City Council hereby finds that the amendments to the 2013 California Building Code and 2013 California Residential Code are reasonably necessary because of local climatic, geological or topographic conditions, and adopts the findings provided below to support the modifications to the 2013 California Building Code and 2013 California Residential Code.

1. Climatic Conditions

A. The jurisdiction of Laguna Hills is located in a semi-arid Mediterranean type climate. It annually experiences extended periods of high temperatures with little or no precipitation. Hot, dry (Santa Ana) winds, which may reach speeds of 70 M.P.H. or greater, are also common to the area. These climatic conditions cause extreme drying of vegetation and common building materials. Frequent periods of drought and low humidity add to the fire danger. This predisposes the area to large destructive fires (conflagration). In addition to directly damaging or destroying buildings, these fires are

also prone to disrupt utility services throughout the County. Obstacles generated by a strong wind, such as fallen trees, street lights and utility poles, and the requirement to climb 75 feet vertically up flights of stairs will greatly impact the response time to reach an incident scene. Additionally, there is a significant increase in the amount of wind force at 60 feet above the ground. Use of aerial type fire fighting apparatus above this height would place rescue personnel at increased risk of injury.

B. The climate alternates between extended periods of drought and brief flooding conditions. Flood conditions may affect the Orange County Fire Authority's ability to respond to a fire or emergency condition. Floods also disrupt utility services to buildings and facilities within the County.

C. Water demand in this densely populated area far exceeds the quantity supplied by natural precipitation; and although the population continues to grow, the already-taxed water supply does not. California is projected to increase in population by nearly 10 million over the next quarter of a century with 50 percent of that growth centered in Southern California. Due to storage capacities and consumption, and a limited amount of rainfall future water allocation is not fully dependable. This necessitates the need for additional and on-site fire protection features. It would also leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of available water to floors in a fire.

D. These dry climatic conditions and winds contribute to the rapid spread of even small fires originating in high-density housing or vegetation. These fires spread very quickly and create a need for increased levels of fire protection. The added protection of fire sprinkler systems and other fire protection features will supplement normal fire department response by providing immediate protection for the building occupants and by containing and controlling the fire spread to the area of origin. Fire sprinkler systems will also reduce the use of water for firefighting by as much as 50 to 75 percent.

2. Topographical conditions

A. Natural; slopes of 15 percent or greater generally occur throughout the foothills of Orange County. The elevation change cause by the hills creates the geological foundation on which communities with Orange County is built and will continue to build. With much of the populated flatlands already built upon, future growth will occur steeper slopes and greater constraints in terrain.

B. Traffic and circulation congestion is an artificially created, obstructive topographical condition, which is common throughout Orange County.

C. These topographical conditions combine to create a situation, which places fire department response time to fire occurrences at risk, and makes it necessary to provide automatic on-site fire-extinguishing systems and other protection measures to protect occupants and property.

3. Geological Conditions

The Orange County region is a densely populated area that has buildings constructed over and near a vast and complex network of faults that are believed to be capable of producing future earthquakes similar or greater in size that the 1994 Northridge and the 1971 Sylmar earthquakes. Earthquake faults run along the northeast and southwest boundaries of Orange County. The Newport-Inglewood Fault, located within Orange County was the source of the destructive 1933 Long Beach earthquake (6.3 magnitude) which took 120 lives and damaged buildings in an area from Laguna Beach to Marina Del Rey to Whittier. In December 1989, another earthquake occurred in the jurisdiction of Irvine at an unknown fault line. Regional planning for reoccurrence of earthquakes is recommended by the state of California, Department of Conservation.

A. Previous earthquakes have been accompanied by disruption of traffic flow and fires. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks there exists a need to provide increased protection for anyone on upper floors of buildings. The October 17, 1989, Santa Cruz earthquake resulted in one major fire in the Marina District (San Francisco). When combined with the 34 other fires locally and over 500 responses, the department was taxed to its fullest capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. This situation creates the need for both additional fire protection and automatic on-site fire protection for building occupants. State Department of Conservation noted in their 1988 report (Planning Scenario on a Major Earthquake on the Newport-Inglewood Fault Zone, page 59), "unfortunately, barely meeting the minimum earthquake standards of building codes places a building on the verge of being legally unsafe."

B. Road circulation features located throughout the County also make amendments reasonably necessary. Located through the County are major roadways, highways and flood control channels that create barriers and slow response times. Hills, slopes, street and storm drain design accompanies with occasional heavy rainfall, causes roadway flooding and landslides and at times may make an emergency access

route impassable. There are areas in Orange County that naturally have extended emergency response times that exceed the 5 minute goal.

C. Soils throughout the County possess corrosive properties that reduce the expected usable life of water services when metallic pipes in contact with soils are utilized.

D. Portions of the County contain active or former oil production fields. These areas contain a variety of naturally occurring gasses, liquids and vapors. These compounds present toxicity or flammability hazards to building occupants. Evaluation of these hazards and the risks they pose to development is necessary implement appropriate mitigation.

Due to the topographical conditions of sprawling development separated by waterways and narrow and congested streets and the expected infrastructure damage inherent in seismic zone described above, it is prudent to rely on automatic fire sprinkler systems to mitigate extended fire department response time and keep fires manageable with reduced fire flow (water) requirements for a given structures. Additional fire protection is also justified to match the current resources of firefighting equipment and personnel within the Orange County Fire Authority.

Additional amendments have been made to the California codes and other supplementary codes. Such amendments are hereby found to be either administrative or procedural in nature or concern themselves with subjects not covered in such codes. The changes made include provisions making each of said codes compatible with other codes enforced by the City.

The findings above are applicable to those amendments proposed to the 2013 Building Standards Code related to the amendments pertaining to the 2013 California Building Code as follows:

CODE SECTION	TITLE (Clarification)	FINDINGS I,II,III
202	General definitions (High-rise, EHLF)	Admin
403.1	High-rise buildings Applicability	II & III-A
412.7.6 thru 412.7.6.13	Emergency Helicopter Landing Facility	II & III-A
710A.3.2	Detached accessory structures	I & II
710A.4	Accessory structure material	I & II
903.2	Where required (Sprinklers)	II & III-B
903.2.8	Group R (Sprinklers)	II-B & III-B

903.3.5.3	Hydraulically calculated systems	I & II
903.4	Sprinkler system supervision and alarms (of valves)	III-A
905.4	Location of Class I standpipe hose connections	III-A
907.2.13	High-rise buildings (Alarm Systems)	I, II-C & III-A
907.3.1	Duct smoke detectors	II & III-A
907.5.2.2	Emergency voice/alarm communication system	II &III-A
907.6.3.2	High-rise buildings	II & III-A
907.6.5	Monitoring	Admin
Chapter 35	Referenced Standards	
	2013 NFPA 13 (Sprinkler Systems)	Admin, II & III
	2013 NFPA 13-R (Multi-Family Sprinkler Systems)	II & III
	2013 NFPA 13-D (Single Family Sprinkler Systems)	II & III
	2013 NFPA 14 (Standpipe Systems)	II & III
	2013 NFPA 24 (Underground Water Supply Systems)	II & III

and;

The findings above are applicable to those amendments proposed to the 2013 Residential Code as follows:

CODE SECTION	**TITLE (Clarification)**	**FINDINGS I,II,III**
R202	Hazardous Fire Area	Admin
R301.9	Development on or near land containing or emitting toxic, combustible or flammable liquids, gases or vapors	III
R301.10	Fuel modification requirements for new construction	I & II
R309.6	Fire sprinkler attached garages, carports with habitable space above	III
R313.1	Townhouse automatic fire sprinkler systems	III
R313.2	One- and two-family dwellings automatic fire sprinkler system	III
R313.3.6.2.2	Calculation procedures	III
R319.1	Address numbers	II
R327.1.6	Fuel modification requirements for new construction	I & II
R1001.13	Chimney spark arrestors	I & II
Chapter 44	Referenced Standards	
	2013 NFPA 13 (Sprinkler Systems)	Admin, II & III
	2013 NFPA 13-R (Multi-Family Sprinkler Systems)	II & III
	2013 NFPA 13-D (Single Family Sprinkler Systems)	II & III

and;

The findings above are applicable to those amendments proposed to the 2013 Green Building Standards Code as follows:

CODE SECTION	TITLE (Clarification)	FINDINGS I,II,III
202	Definitions	Admin
4.304.1	Irrigation controllers	I-C

SECTION 2. Title 10, Chapter 10.28 of the Laguna Hills Municipal Code is hereby amended and restated in its entirety to read as follows:

Chapter 10-28 California Building Code

10-28-010 Adoption of the California Building Code.

The California Building Code, 2013 Edition, based on the 2012 Edition of the International Building Code as published by the International Code Council, together with the amendments provided in this chapter, is hereby adopted and incorporated by reference, as if set forth at length herein, as the Building Code of the City of Laguna Hills, regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area and maintenance of all buildings and/or structures in the City. Not less than one copy of said code has been filed in the office of the City Clerk and shall be made available for public inspection.

10-28.030 Amendments to the California Building Code.

Section 202 Definitions is hereby amended by adding "Approach-Departure Path," "Emergency Helicopter Landing Facility (EHLF)," "Safety Area," and "Takeoff and Landing Area" and revising the definition of "High-Rise Structure" as follows:

APPROACH-DEPARTURE PATH. The flight path of the helicopter as it approaches or departs from the landing pad.

EMERGENCY HELICOPTER LANDING FACILITY (EHLF). A landing area on the roof of a building that is not intended to function as a heliport or helistop but is capable of accommodating fire or medical helicopters engaged in emergency operations.

High-Rise Structure. Every building of any type of construction or occupancy having floors used for human occupancy located more than 55 above the lowest

floor level having building access (see Section 403), except buildings used as hospitals as defined in the Health and Safety Code Section 1250.

SAFETY AREA. A defined area surrounding the landing pad which is free of obstructions.

TAKEOFF AND LANDING AREA. The combination of the landing pad centered within the surrounding safety area.

Section 403 HIGH-RISE BUILDINGS AND GROUP I-2 OCCUPANCIES HAVING OCCUPIED FLOORS LOCATED MORE THAN 75 FEET ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS is hereby revised as follows:

Section 403 HIGH-RISE BUILDINGS AND GROUP I-2 OCCUPANCIES HAVING OCCUPIED FLOORS LOCATED MORE THAN 55 FEET ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS

Section 403.1 Applicability is hereby revised as follows:

403.1 Applicability. New high-rise buildings and Group I-2 having occupied floors located more than 55 feet above the lowest level of fire department vehicle access and new Group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of fire department vehicle access shall comply with Sections 403.2 through 403.6.

Section 412.7 Heliports and helistops is hereby amended by adding Sections 412.7.6 through 412.7.6.13 as follows:

412.7.6. Emergency Helicopter Landing Facility. Emergency Helicopter Landing Facility (EHLF) shall be constructed as specified in Section 412.7.6.1 through 412.7.6.13.

412.7.6.1 General. Every building of any type of construction or occupancy having floors used for human occupancy located more than 75 ft above the lowest level of the fire department vehicle access shall have a rooftop emergency helicopter landing facility (EHLF) in a location approved by the fire code official for use by fire, police, and emergency medical helicopters only.

412.7.6.2 Rooftop Landing Pad. The landing pad shall be 50 ft. x 50 ft. or a 50 ft. diameter circle that is pitched or sloped to provide drainage away from access

points and passenger holding areas at a slope of 0.5 percent to 2 percent. The landing pad surface shall be constructed of approved non-combustible, nonporous materials. It shall be capable of supporting a helicopter with a maximum gross weight of 15,000 lbs. For structural design requirements, see California Building Code.

412.7.6.3 Approach-Departure Path. The emergency helicopter landing facility shall have two approach-departure paths separated in plan from each other by at least 90 degrees. No objects shall penetrate above the approach-departure paths. The approach-departure path begins at the edge of the landing pad, with the same width or diameter as the landing pad and is a rising slope extending outward and upward at a ratio of eight feet horizontal distance for every one foot of vertical height.

412.7.6.4 Safety Area. The safety area is a horizontal plane level with the landing pad surface and shall extend 25 ft in all directions from the edge of the landing pad. No objects shall penetrate above the plane of the safety area.

412.7.6.5 Safety Net. If the rooftop landing pad is elevated more than 30 in. (2'-6") above the adjoining surfaces, a 6 ft in wide horizontal safety net capable of supporting 25 lbs/psf shall be provided around the perimeter of the landing pad. The inner edge of the safety net attached to the landing pad shall be slightly dropped (greater than 5 in. but less than 18 in.) below the pad elevation. The safety net shall slope upward but the outer safety net edge shall not be above the elevation of the landing pad.

412.7.6.6 Take-off and Landing Area. The takeoff and landing area shall be free of obstructions and 100 ft x 100 ft. or 100 ft. diameter.

412.7.6.7 Wind Indicating Device. An approved wind indicating device shall be provided but shall not extend into the safety area or the approach-departure paths.

412.7.6.8 Special Markings. The emergency helicopter landing facility shall be marked as indicated in Figure 412.7.6.8.

412.7.6.9 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the floor below shall

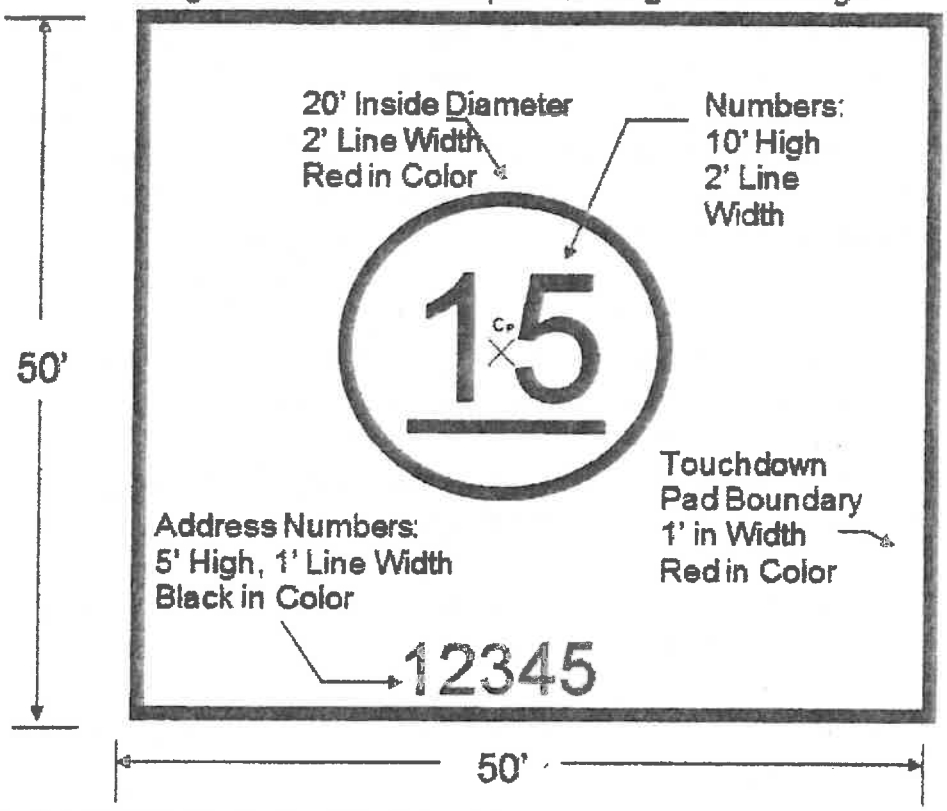
comply with Section 1009.7.2 for riser height and tread depth. Handrails shall be provided, but shall not extend above the platform surface.

412.7.6.10 Standpipe systems. The standpipe system shall be extended to the roof level on which the EHLF is located. All portions of the EHLF area shall be within 150 feet of a 2.5-inch outlet on a Class I or III standpipe.

412.7.6.11 Fire extinguishers. A minimum of one portable fire extinguisher having a minimum 80-B:C rating shall be provided and located near the stairways or ramp to the landing pad. The fire extinguisher cabinets shall not penetrate the approach-departure paths, or the safety area. Installation, inspection, and maintenance of extinguishers shall be in accordance with California Fire Code Section 906.

412.7.6.13 EHLF. Fueling, maintenance, repairs, or storage of helicopters shall not be permitted.

Figure 412.7.6.8 Helicopter Landing Pad Markings



1. The preferred background is white or tan.
2. The circled, red numbers indicate the allowable weight that the facility is capable of supporting in thousands of pounds
3. The numbers shall be oriented towards the preferred flight (typically facing the prevailing wind).

Section 710A.3.2 is hereby revised as follows:

710A.3.2 Detached accessory structures within 50 feet of an applicable building shall comply with the requirements of this section.

Section 710A.4 Requirements is hereby revised as follows:

710A.4 Requirements. Accessory structures shall be constructed of non-combustible or ignition-resistant materials.

Section 903.2 Where required is hereby revised as follows:

903.2 Where required. Approved automatic sprinkler systems in buildings and structures shall be provided when one of the following conditions exists:

1. **New buildings:** Notwithstanding any applicable provisions of Sections 903.2.1 through 903.2.12, an automatic fire-extinguishing system shall

also be installed in all occupancies when the total building area exceeds 5,000 square feet (465 m^2) as defined in the CBC, regardless of fire areas or allowable area, or more than two stories in height.

2. **Existing buildings:** Notwithstanding any applicable provisions of this code, an automatic sprinkler system shall be provided in an existing building when an addition occurs and when one of the following conditions exists:

   a. When an addition is 33% or more of the existing building area, and the resulting building area exceeds 5000 square feet (465 m^2) as defined in Section 202; or
   b. When an addition exceeds 2000 square feet (186 m^2) and the resulting building area exceeds 5000 square feet (465 m^2) as defined in Section 202.
   c. An additional story is added above the second floor regardless of fire areas or allowable area.

   Exception: Group R-3 occupancies. Group R-3 occupancies shall comply with Section 903.2.8.

Section 903.2.8 Group R is hereby revised as follows:

903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 902.1 shall be provided throughout all buildings with a Group R fire area as follows:

1. **New buildings:** An automatic sprinkler system shall be installed throughout all new buildings.

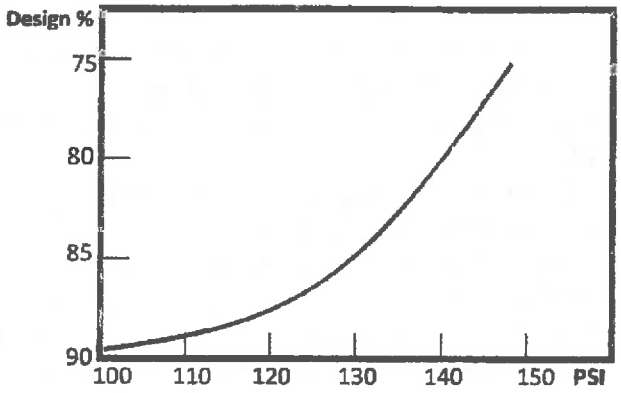
2. **Existing R-3 buildings:** An automatic sprinkler system shall be installed throughout when one of the following conditions exists:
   a. When an addition is 33% or more of the existing building area as defined in Section 202, and greater than 1000 square feet (93 m^2) within a two year period; or
   b. An addition when the existing building is already provided with automatic sprinklers; or.
   c. When an existing Group R Occupancy is being substantially renovated, and where the scope of the renovation is such that the Building Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.

Section 903.3.5.3 Hydraulically calculated systems is hereby added as follows:

903.3.5.3 Hydraulically calculated systems. The design of hydraulically calculated fire sprinkler systems shall not exceed 90% of the water supply capacity.

Exception: When static pressure exceeds 100 psi, and required by the Fire Code Official, the fire sprinkler system shall not exceed water supply capacity specified by Table 903.3.5.3

TABLE 903.3.5.3
Hydraulically Calculated Systems



Section 903.4 Sprinkler system supervision and alarms is hereby revised by deleting item 3 and 5 and renumbering the Exceptions as follows:

1. Automatic sprinkler systems protecting one- and two-family dwellings.
2. Limited area systems serving fewer than 20 sprinklers.
3. Jockey pump control valves that are sealed or locked in the open position.
4. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
5. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.

Section 905.4 Location of Class I standpipe hose connections is hereby amended by adding item 7 as follows:

7. The centerline of the 2.5 inch (63.5 mm) outlet shall be no less than 18 inches (457.2 mm) and no more than 24 inches above the finished floor.

Section 907.2.13 High-rise buildings is hereby revised as follows:

907.2.13 High-rise buildings and Group I-2 occupancies having floors located more than 55 feet above the lowest level fire department vehicle access. High-rise buildings and Group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of fire department vehicle access shall be provided with an automatic smoke detection in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.

Exceptions:

1. Airport traffic control towers in accordance with Section 907.2.22 and Section 412 of the California Building Code.
2. Open parking garages in accordance with Section 406.5 of the California Building Code.
3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the California Building Code.
4. Low-hazard special occupancies in accordance with Section 503.1.1 of the California Building Code.
5. In Group I-2 and R-2.1 occupancies, the alarm shall sound at a constantly attended location and general occupant notification shall be broadcast by the emergency voice/alarm communication system

Section 907.3.1 Duct smoke detectors is hereby amended as follows:

907.3.1 Duct smoke detectors. Smoke detectors installed in ducts shall be listed for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected to the building's fire alarm control unit when a fire alarm system is installed. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at a constantly attended location and shall perform the intended fire safety function in accordance with this code and the California Mechanical Code. Duct smoke detectors shall not be used as a substitute for required open area detection.

Exception: In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and an audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.

Section 907.5.2.2 Emergency voice/alarm communication system is hereby revised as follows.

907.5.2.2 Emergency voice/alarm communication system. Emergency voice/alarm communication system required by this code shall be designed and installed in accordance with NFPA 72. The operation of any automatic fire detector, sprinkler water flow device or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving approved information and directions for a general or staged evacuation in accordance with the building's fire safety and evacuation plans required by Section 404. In high-rise buildings and Group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of fire department vehicle access, the system shall operate on a minimum of the alarming floor, the floor above and the floor below. Speakers shall be provided throughout the building by paging zones. At a minimum, paging zones shall be provided as follows:

1. Elevator groups.
2. Exit stairways.
3. Each floor.
4. Areas of refuge as defined in Section 1002.1.
5. Dwelling Units in apartment houses.
6. Hotel guest rooms or suites.

Exception: In Group I-2 and R-2.1 occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

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Section 907.6.3.2 High-rise buildings is hereby revised as follows.

907.6.3.2 High-rise buildings. High-rise buildings and Group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of fire department vehicle access, a separate zone by floor shall be provided for all of the following types of alarm-initiating devices where provided:

1. Smoke detectors.
2. Sprinkler water-flow devices.
3. Manual fire alarm boxes
4. Other approved types of automatic detection devices or suppression systems.

Section 907.6.5 Monitoring is hereby revised as follows

907.6.5 Monitoring. Fire alarm systems required by this chapter or by the California Building Code shall be monitored by an approved supervising station in accordance with NFPA 72, this section, and per Orange County Fire Authority Guideline "New and Existing Fire Alarm & Signaling Systems.

Chapter 44 Referenced Standards is hereby revised as follows:

NFPA 13, 2013 Edition, Standard for the Installation of Sprinkler Systems is hereby amended as follows:

Section 6.8.3 is hereby revised as follows:

6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2 ½" inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The FDC may be located within 150 feet of a private fire hydrant when approved by the fire code official. The size of piping and the number of inlets shall be approved by the fire code official. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red. When the fire sprinkler density design requires 500 gpm (including inside hose stream demand) or greater, or a standpipe system is included, four 2 ½" inlets shall be provided.

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Section 8.3.3.1 is hereby revised as follows:

8.3.3.1. When fire sprinkler systems are installed in shell buildings of undetermined use (Spec Buildings) other than warehouses (S occupancies), fire sprinklers of the quick-response type shall be used. Use is considered undetermined if a specific tenant/occupant is not identified at the time the fire sprinkler plan is submitted. Sprinklers in light hazard occupancies shall be one of the following:

1. Quick-response type as defined in 3.6.4.7
2. Residential sprinklers in accordance with the requirements of 8.4.5
3. Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers

4. Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems

Section 8.17.1.1.1 is hereby added as follows:

8.17.1.1.1 Residential Water Flow Alarms. A local water-flow alarm shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system, where provided. Group R occupancies not requiring a fire alarm system by the California Fire Code shall be provided with a minimum of one approved interior alarm device in each unit. Interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces within each unit. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA, whichever is greater. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Section 11.1.1.2 is hereby added as follows:

11.1.1.2 When fire sprinkler systems are required in buildings of undetermined use other than warehouses, they shall be designed and installed to have a fire sprinkler density of not less than that required for an Ordinary Hazard Group 2 use, with no reduction(s) in density or design area. Warehouse fire sprinkler systems shall be designed to Figure 16.2.1.3.2 (d) curve "G". Use is considered undetermined if a specific tenant/occupant is not identified at the time the sprinkler plan is submitted. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the occupant to upgrade the system to the required density for the new occupancy.

Section 11.2.3.1.1.1 is hereby added as follows:

11.2.3.1.1.1 The available water supply for fire sprinkler system design shall be determined by one of the following methods, as approved by the Fire Code Official:

1. Subtract the project site elevation from the low water level for the appropriate pressure zone and multiply the result by 0.433;
2. Use a maximum of 40 psi, if available;

3. Utilize the Orange County Fire Authority water-flow test form/directions to document a flow test conducted by the local water agency or an approved third party licensed in the State of California.

Section 23.2.1.1 is hereby revised as follows:

23.2.1.1 Where a water flow test is used for the purposes of system design, the test shall be conducted no more than 6 months prior to working plan submittal unless otherwise approved by the authority having jurisdiction.

NFPA 13R, 2013 Edition, Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height is hereby amended as follows:

Section 6.16.1 is hereby revised as follows:

6.16.1 A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in the California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces within each dwelling unit. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA, whichever is greater. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

There shall also be a minimum of one exterior alarm indicating device, listed for outside service and audible from the access roadway that serves that building.

NFPA 13D, 2013 Edition, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

Section 4.1.3 is hereby added as follows:

4.1.3 Stock of Spare Sprinklers. A supply of at least two sprinklers for each type shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced.

Section 4.1.3.2 is hereby added as follows:

4.1.3.2 The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

Section 4.1.3.3 is hereby added as follows:

4.1.3.3 The sprinklers shall be kept in a cabinet located where the temperature to which they are subjected will at no time exceed 100 °F (38°C).

Section 4.1.3.4 is hereby added as follows:

4.1.3.4 A special sprinkler wrench shall be provided and kept in the cabinet to be used in the removal and installation of sprinklers. One sprinkler wrench shall be provided for each type of sprinkler installed.

Section 7.1.2 is hereby revised as follows:

7.1.2 The system piping shall not have a separate control valve unless supervised by a central station, proprietary, or remote station alarm service.

Section 7.6 is hereby deleted in its entirety and replaced as follows:

7.6 Alarms. Exterior alarm indicating device shall be listed for outside service and audible from the street from which the house is addressed. Exterior audible devices shall be placed on the front or side of the structure and the location is subject to final approval by the fire code official. Additional interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA, whichever is greater. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Exceptions:

1. When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.
2. When smoke detectors specified under CBC Section 907.2.11 are used to sound an alarm upon water flow switch activation.

NFPA 14, 2013 Edition, Installation of Standpipe and Hose Systems is hereby amended as follows:

Section 7.3.1.1 is hereby is deleted in its entirety and replaced as follows:

7.3.1.1 Class I and III Standpipe hose connections shall be unobstructed and shall be located not less than 18 inches or more than 24 inches above the finished floor. Class II Standpipe hose connections shall be unobstructed and shall be located not less than 3 feet or more than 5 feet above the finished floor.

NFPA 24, 2013 Edition, Standard for the Installation of Private Fire Service Mains and Their Appurtenances is hereby amended as follows:

Section 6.2.1.1 is hereby added as follows:

6.2.1.1 The closest upstream indicating valve to the riser shall be painted OSHA red.

Section 6.2.11 (5) is hereby deleted without replacement and (6) and (7) renumbered:

(5) Control Valves installed in a fire-rated room accessible from the exterior.
(6) Control valves in a fire-rated stair enclosure accessible from the exterior as permitted by the authority having jurisdiction.

Section 6.3.3 is hereby added as follows:

6.3.3 All post indicator valves controlling fire suppression water supplies shall be painted OSHA red.

Section 10.1.6.3 is hereby added as follows:

10.1.6.3 All ferrous pipe shall be coated and wrapped. Joints shall be coated and wrapped after assembly. All fittings shall be protected with a loose 8-mil polyethylene tube. The ends of the tube shall extend past the joint by a minimum of 12 inches and be sealed with 2 inch wide tape approved for underground use. Galvanizing does not meet the requirements of this section.

Exception: 304 or 316 Stainless Steel pipe and fittings.

Section 10.3.6.2 is hereby revised as follows:

10.3.6.2 All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material, prior to poly-tube, and after installation.

Exception: Bolted joint accessories made from 304 or 316 stainless steel.

Section 10.3.6.3 is hereby added as follows:

10.3.6.3 All bolts used in pipe-joint assembly shall be 316 stainless steel.

Section 10.6.3.1 is hereby deleted and replaced as follows:

10.6.3.1 Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 24 inches, as measured from the interior face of the exterior wall to the center of the vertical pipe. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints or it shall comply with 10.6.2.

Section 10.6.4 is hereby revised as follows:

10.6.4 Pipe joints shall not be located under foundation footings. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints.

SECTION 3. Chapter 10-32 of the Laguna Hills Municipal Code is hereby amended and restated in its entirety to read as follows:

Chapter 10-32 CALIFORNIA MECHANICAL CODE

10-32.010 Adoption of the California Mechanical Code.

The California Mechanical Code, 2013 Edition, based on the 2012 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials, is hereby adopted and incorporated by reference, as if set forth at length herein, as the Mechanical Code of the City of Laguna Hills, regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance of heating, ventilating, cooling, refrigeration systems, incinerators and other miscellaneous heat producing appliances. Not less than one copy of said code has been filed in the office of the City Clerk and shall be made available for public inspection.

SECTION 4. Chapter 10-36 of the Laguna Hills Municipal Code is hereby amended and restated in its entirety to read as follows:

Chapter 10-36 CALIFORNIA ELECTRICAL CODE

10-36.010 Adoption of the California Electrical Code.

The California Electrical Code, 2013 Edition, based on the 2011 National Electrical Code as published by the National Fire Protection Association, is hereby adopted and incorporated by reference, as if set forth at length herein, as the Electrical Code of the City of Laguna Hills, regulating all installation, arrangement, alteration, repair, use and other operation of electrical wiring, connections, fixtures and other electrical appliances on premises within the City. Not less than one copy of said code has been filed in the office of the City Clerk and shall be made available for public inspection.

SECTION 5. Chapter 10-40 of the Laguna Hills Municipal Code is hereby amended and restated in its entirety to read as follows:

Chapter 10-40 CALIFORNIA PLUMBING CODE

10-40.010 Adoption of the California Plumbing Code.

The California Plumbing Code, 2013 Edition, based on the 2012 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials, is hereby adopted and incorporated by reference, as if set forth at length herein, as the Plumbing Code of the City of Laguna Hills, regulating erection, installation, alteration, repair, relocation, replacement, maintenance or use of plumbing systems within the City. Not less than one copy of said code has been filed in the office of the City Clerk and shall be made available for public inspection.

SECTION 6. Chapter 10-48 of the Laguna Hills Municipal Code is hereby amended and restated in its entirety to read as follows:

Chapter 10-48 CALIFORNIA RESIDENTIAL CODE

10-48.010 Adoption of the California Residential Code.

The California Residential Code, 2013 Edition, based on the 2012 International Residential Code as published by the International Code Council together with the amendments provided in this chapter, is hereby adopted and incorporated by reference, as if set forth at length herein, as the Residential Code of the City of Laguna Hills regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area and maintenance of all residential buildings and/or structures in the City. Not less than one copy of said code has been filed in the office of the City Clerk and shall be made available for public inspection.

10-48.020 Amendments to the Residential Code.

Section R202 Definitions is hereby revised by adding "Hazardous Fire Area" as follows:

> **HAZARDOUS FIRE AREA.** Includes all areas identified within California Fire Code Section 4906.2 and other areas as determined by the Fire Code Official as presenting a fire hazard due to the presence of combustible vegetation, or the proximity of the property to an area that contains combustible vegetation.

Section R301.9 Development on or Near Land Containing or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors is hereby added as follows:

> **R301.9 Development On Or Near Land Containing Or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors.** The fire code official may require the submittal for approval of geological studies, evaluations, reports, remedial recommendations and/or similar documentation from a state-licensed and department-approved individual or firm, on any parcel of land to be developed which has, or is adjacent to, or within 1,000 feet (304.8 m) of a parcel of land that has an active, inactive, or abandoned oil or gas well operation, petroleum or chemical refining facility, petroleum or chemical storage, or may contain or give off toxic, combustible or flammable liquids, gases or vapors.

Section R301.10 Fuel Modification Requirements for New Construction is hereby added as follows:

R301.10 Fuel Modification Requirements for New Construction. All new buildings to be built or installed in areas with or adjacent to land having hazardous combustible vegetation shall comply with the requirements in the edition of OCFA Vegetation Management Guidelines currently in use at the time.

Section R309.6 Fire sprinkler attached garages, and carports with habitable space above is hereby amended by modifying the Exception as follows:

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing carports and/or garages that do not have an automatic fire sprinkler system installed unless a sprinkler system is required in accordance with California Fire Code Section 903.2.8.

Section R313.1 Townhouse automatic fire sprinkler systems is hereby amended by modifying the Exception as follows:

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses that do not have an automatic fire sprinkler system installed unless a sprinkler system is required in accordance with California Fire Code Section 903.2.8.

Section R313.2 One- and two-family dwellings automatic fire sprinkler systems is hereby amended by modifying the Exception as follows:

Exception: An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic sprinkler system unless a sprinkler system is required in accordance with California Fire Code Section 903.2.8.

Section R313.3.6.2.2 Calculation procedure is hereby revised as follows:

R313.3.6.2.2 Calculation procedure. Determination of the required size for water distribution piping shall be in accordance with the following procedure and California Fire Code Section 903.3.5.3.

Section R319.1 Address numbers is hereby revised as follows:

R319.1 Address numbers. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the

property. These numbers shall contrast with their background. Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches (101.6 mm) high with a minimum stroke width of 0.5 inch (12.7 mm). Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address numbers shall be maintained.

Section R327.1.6 Fuel Modification Requirements for New Construction is hereby added as follows:

R327.1.6 Fuel Modification Requirements for New Construction. All new buildings to be built or installed in hazardous fire areas shall comply with the following:

1. Preliminary fuel modification plans shall be submitted to and approved by the fire code official concurrent with the submittal for approval of any tentative map
2. Final fuel modification plans shall be submitted to and approved by the fire code official prior to the issuance of a grading permit.
3. The fuel modification plan shall include provisions for the maintenance of the fuel modification for perpetuity.
4. The fuel modification plans shall meet the criteria set forth in the Fuel Modification Section of the Orange County Fire Authority Vegetation Management Guidelines.
5. The fuel modification plan may be altered if conditions change. Any alterations to the fuel modification areas shall have prior approval from the fire code official.
6. All elements of the fuel modification plan shall be maintained in accordance with the approved plan and are subject to the enforcement process outlined in the Fire Code.

Section R1001.13 Chimney spark arresters is hereby added as follows:

R1001.13 Chimney spark arresters. All chimneys attached to any appliance or fireplace that burns solid fuel shall be equipped with an approved spark arrester. Chimneys serving outdoor appliances or fireplaces shall be equipped with a spark arrester. The spark arrester shall meet the requirements of Section 2113.9.2 of the California Building Code.

Chapter 44 Referenced Standards is revised as follows:

NFPA 13, 2013 Edition, Installation of Sprinkler Systems is hereby amended as follows:

Section 6.8.3 is hereby revised as follows:

6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2 ½" inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The FDC may be located within 150 feet of a private fire hydrant when approved by the fire code official. The size of piping and the number of inlets shall be approved by the fire code official. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red. When the fire sprinkler density design requires 500 gpm (including inside hose stream demand) or greater, or a standpipe system is included, four 2 ½" inlets shall be provided.

Section 8.3.3.1 is hereby revised as follows:

8.3.3.1 When fire sprinkler systems are installed in shell buildings of undetermined use (Spec Buildings) other than warehouses (S occupancies), fire sprinklers of the quick-response type shall be used. Use is considered undetermined if a specific tenant/occupant is not identified at the time the fire sprinkler plan is submitted. Sprinklers in light hazard occupancies shall be one of the following:

1. Quick-response type as defined in 3.6.4.7
2. Residential sprinklers in accordance with the requirements of 8.4.5
3. Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers
4. Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems

Section 8.17.1.1.1 is hereby added as follows:

8.17.1.1.1 Residential Water Flow Alarms. A local water-flow alarm shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system, where provided. Group R occupancies not requiring a fire alarm system by the California Fire Code shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be minimum of 15 DBA

above the average ambient sound or a minimum of 75 DBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Section 11.1.1.2 is hereby added as follows:

11.1.1.2 When fire sprinkler systems are required in buildings of undetermined use other than warehouses, they shall be designed and installed to have a fire sprinkler density of not less than that required for an Ordinary Hazard Group 2 use, with no reduction(s) in density or design area. Warehouse fire sprinkler systems shall be designed to Figure 16.2.1.3.2 (d) curve "G". Use is considered undetermined if a specific tenant/occupant is not identified at the time the sprinkler plan is submitted. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the occupant to upgrade the system to the required density for the new occupancy.

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Section 11.2.3.1.1.1 is hereby added as follows:

11.2.3.1.1.1 The available water supply f
be determined by one of the following me
Official:

1. Subtract the project site elevation from the low water level for the appropriate pressure zone and multiply the result by 0.433;
2. Use a maximum of 40 psi, if available;
3. Utilize the Orange County Fire Authority water-flow test form/directions to document a flow test conducted by the local water agency or an approved third party licensed in the State of California.

Section 23.2.1.1 is hereby revised as follows:

23.2.1.1 Where a water flow test is used for the purposes of system design, the test shall be conducted no more than 6 months prior to working plan submittal unless otherwise approved by the authority having jurisdiction.

NFPA 13R, 2013 Edition, Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height is hereby amended as follows:

Section 6.16.1 is hereby revised as follows:

6.16.1 A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Section 907.2.8 of the 2010 California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

There shall also be a minimum of one exterior alarm indicating device, listed for outside service and audible from the access roadway that serves that building.

NFPA 13D 2013 Edition, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

Section 4.1.3 is hereby added as follows:

4.1.3 Stock of Spare Sprinklers

Section 4.1.3.1 is hereby added as follows:

4.1.3.1. A supply of at least two sprinklers for each type shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced.

Section 4.1.5.2 is hereby added as follows:

4.1.3.2 The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

Section 4.1.3.3 is hereby added as follows:

4.1.3.3 The sprinklers shall be kept in a cabinet located where the temperature to which they are subjected will at no time exceed 100 °F (38°C).

Section 4.1.3.4 is hereby added as follows:

4.1.3.4 A special sprinkler wrench shall be provided and kept in the cabinet to be used in the removal and installation of sprinklers. One sprinkler wrench shall be provided for each type of sprinkler installed.

Section 7.1.2 is hereby revised as follows:

7.1.2 The system piping shall not have a separate control valve unless supervised by a central station, or remote station alarm service

Section 7.6 is hereby deleted in its entirety and replaced as follows:

7.6 Alarms. Exterior alarm indicating device shall be listed for outside service and audible from the street from which the house is addressed. Exterior audible devices shall be placed on the front or side of the structure and the

fire code official. Additional interior
e 55 dBA or 15 dBA above ambient,
l sleeping areas with all intervening
5 dBA above the average ambient
hichever is greater. Audible devices
ble circuit (except for over-current
liances in the residence.

Exceptions:

1. When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.
2. When smoke detectors specified under CBC Section 907.2.11 are used to sound an alarm upon water flow switch activation.

Section AO103.3 Vehicular gates or other barriers across required fire apparatus access roads is hereby added as follows:

> **AO103.3 Vehicular gates or other barriers across required fire apparatus access roads.** The installation of gates or other barriers across a required fire apparatus access road shall comply with the requirements set forth in the 2013 California Fire Code Section 503.6.

SECTION 7. Title 10, Chapter 10-52 of the Laguna Hills Municipal Code is hereby amended and restated in its entirety to read as follows:

Chapter 10-52 California Green Building Standards Code

10-52.010 Adoption of California Green Building Standards Code.

The California Green Building Standards Code, 2013 Edition, together with amendments provided in this chapter, is hereby adopted and incorporated by reference, as if set forth at length herein, as the green building standards code of the City of Laguna Hills regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area and maintenance of all buildings and/or structures in the City. Not less than one copy of said code has been filed in the office of the City Clerk and shall be made available for public inspection.

10-52.020 Amendments to the Green Building Standards Code.

Section 202 Definitions is revised by adding "Sustainability" as follows:

> **SUSTAINABILITY.** Consideration of present development and construction impacts on the community, the economy, and the environment without compromising the needs of the future.

Section 4.304.1 Irrigation controllers is hereby deleted in its entirety and replaced as follows:

> **4.304.1** Irrigation controllers. Automatic irrigation system controllers for landscaping provided and installed at the time of final inspection and shall comply with the following:
>
> 1. Controllers shall be weather- or soil moisture-based irrigation controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.

2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

SECTION 8. Title 10, Chapter 10-44 of the Laguna Hills Municipal Code is hereby amended and restated in its entirety to read as follows:

Chapter 10-44 Swimming Pool and Spa Code

10-44.010 Adoption of the International Swimming Pool and Spa Code.

The International Swimming Pool and Spa Code, 2012 Edition, published by the International Code Council, together with the amendments provided in this chapter, is hereby adopted and incorporated by reference, as if set forth at length herein, as the Swimming Pool and Spa Code of the City of Laguna Hills. Not less than one copy of said code has been filed in the office of the City Clerk and shall be made available for public inspection.

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10-44.020 Amendments to the Swimming Pool and Spa Code.

Section 301 is amended by adding a Subsections 301.3, 301.4, 301.5 and 301.6 as follows:

301.3 Waste water from any filter, scum filter, scum gutter, overflow, pool emptying line, or similar apparatus or appurtenance shall discharge into an approved type receptor and subsequently into a public sewer. The flood level rim of such receptor shall be at least six (6) inches (152 mm) above the flood level of the adjacent ground. Each such receptor when permitted to be connected to any part of a drainage system shall be provided with an approved trap with a minimum pipe size of three (3) inches (76 mm).

301.4 portions of Article 2.5, of the Swimming Pool Safety Act, Health and Safety Code are hereby adopted and repeated herein for convenience.

115920. Short title.

115921. Definitions.

115922. Construction permit; safety features required.

115923. Enclosure; required characteristics.

115924. Agreements to build; notice of provisions.

115925. Exempt facilities.

115926. Application to facilities regulated by Department of Social Services.

115927. Modification and interpretation of article.

Article 2.5

THE SWIMMING POOL SAFETY ACT

115920. This act shall be known and may be cited as the Swimming Pool Safety Act.

115921. As used in this article the following terms have the following meanings:

(a) "Swimming pool" or "pool" means any structure intended for swimming or recreational bathing that contains water over 18 inches deep. "Swimming pool" includes in-ground and aboveground structures and includes, but is not limited to, hot tubs, spas, portable spas, and nonportable wading pools.

(b) "Public swimming pool" means a swimming pool operated for the use of the general public with or without charge, or for the use of the members and guests of a private club. Public swimming pool does not include a swimming pool located on the grounds of a private single-family home.

(c) "Enclosure" means a fence, wall, or other barrier that isolates a swimming pool from access to the home.

(d) "Approved safety pool cover" means a manually or power-operated safety pool cover that meets all of the performance standards of the American Society for Testing and Materials (ASTM), in compliance with standard F1346-91.

(e) "Exit alarms" means devices that make audible, continuous alarm sounds when any door or window, that permits access from the residence to the pool area that is without any intervening enclosure, is opened or is left ajar. Exit alarms may be battery operated or may be connected to the electrical wiring of the building.

(f) "ANSI/APSP performance standard" means a standard that is accredited by the American National Standards Institute (ANSI) and published by the Association of Pool and Spa Professionals (APSP).

(g) "Suction outlet" means a fitting or fixture typically located at the bottom or on the sides of a swimming pool that conducts water to a recirculating pump.

115922.

(a) Commencing January 1, 2007, except as provided in Section 115925, whenever a building permit is issued for construction of a new swimming pool or spa, or any building permit is issued for remodeling of an existing pool or spa, at a private, single-family home, it shall be equipped with at least one of the following seven drowning prevention safety features:

(1) The pool shall be isolated from access to a home by an enclosure that meets the requirements of Section 115923.
(2) The pool shall incorporate removable mesh pool fencing that meets American Society for Testing and Materials (ASTM) Specifications F 2286 standards in conjunction with a gate that is self-closing and self-latching and can accommodate a key lockable device.
(3) The pool shall be equipped with an approved safety pool cover that meets all requirements of the ASTM Specifications F 1346.
(4) The residence shall be equipped with exit alarms on those doors providing direct access to the pool.
(5) All doors providing direct access from the home to the swimming pool shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor.
(6) Swimming pool alarms that, when placed in pools, will sound upon detection of accidental or unauthorized entrance into the water. These pool alarms shall meet and be independently certified to the ASTM Standard F 2208 "Standards Specification for Pool Alarms" which includes surface motion, pressure, sonar, laser, and infrared type alarms. For purposes of this article, "swimming pool alarms" shall not include swimming protection alarm devices designed for individual use, such as an alarm attached to a child that sounds when the child exceeds a certain distance or becomes submerged in water.
(7) Other means of protection, if the degree of protection afforded is equal to or greater than that afforded by any of the devices set forth above, and have been independently verified by an approved testing laboratory as meeting standards for those devices established by the ASTM or the American Society of Mechanical Engineers (ASME).

(b) Prior to the issuance of any final approval for the completion of permitted construction or remodeling work, the local building code official shall inspect the drowning safety prevention devices required by this act and if no violations are found, shall give final approval.

115923. An enclosure shall have all of the following characteristics:

(a) Any access gates through the enclosure open away from the swimming pool, and are self-closing with a self-latching device placed no lower than 60 inches above the ground.

(b) A minimum height of 60 inches.

(c) A maximum vertical clearance from the ground to the bottom of the enclosure of two inches.

(d) Gaps or voids, if any, do not allow passage of a sphere equal to or greater than four inches in diameter.

(e) An outside surface free of protrusions, cavities, or other physical characteristics that would serve as handholds or footholds that could enable a child below the age of five years to climb over.

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115924.

(a) Any person entering into an agreement to build a swimming pool or spa, or to engage in permitted work on a pool or spa covered by this article, shall give the consumer notice of the requirements of this article.

(b) Pursuant to existing law, the Department of Health Services shall have available on the department's Web site, commencing January 1, 2007, approved pool safety information available for consumers to download. Pool contractors are encouraged to share this information with consumers regarding the potential dangers a pool or spa poses to toddlers. Additionally, pool contractors may provide the consumer with swimming pool safety materials produced from organizations such as the United States Consumer Product Safety Commission, Drowning Prevention Foundation, California Coalition for Children's Safety & Health, Safe Kids Worldwide, Association of Pool and Spa Professionals, or the American Academy of Pediatrics.

115925. The requirements of this article shall not apply to any of the following:

(a) Public swimming pools.

(b) Hot tubs or spas with locking safety covers that comply with the American Society for Testing Materials-Emergency Performance Specification (ASTM-ES 13-89).

(c) Any pool within the jurisdiction of any political subdivision that adopts an ordinance for swimming pool safety that includes requirements that are at least as stringent as this article.

(d) An apartment complex, or any residential setting other than a single-family home.

115926. This article does not apply to any facility regulated by the State Department of Social Services even if the facility is also used as the private residence of the operator. Pool safety in those facilities shall be regulated pursuant to regulations adopted therefore by the State Department of Social Services.

115927. Notwithstanding any other provision of law, this article shall not be subject to further modification or interpretation by any regulatory agency of the state, this authority being reserved exclusively to local jurisdictions, as provided for in subdivision (e) of Section 115922 and subdivision (c) of Section 115924.

115928. Whenever a building permit is issued for the construction of a new swimming pool or spa, the pool or spa shall meet all of the following requirements:

(a)

(1) The suction outlets of the pool or spa for which the permit is issued shall be equipped to provide circulation throughout the pool or spa as prescribed in paragraphs (2) and (3).

(2) The swimming pool or spa shall either have at least two circulation suction outlets per pump that shall be hydraulically balanced and symmetrically plumbed through one or more "T" fittings, and that are separated by a distance of at least three feet in any dimension between the suction outlets, or be designed to use alternatives to suction outlets, including, but not limited to, skimmers or perimeter overflow systems to conduct water to the recirculation pump.

(3) The circulation system shall have the capacity to provide a complete turnover of pool water, as specified in Section 3124B of Chapter 31B of the California Building Standards Code (Title 24 of the California Code of Regulations).

(b) Suction outlets shall be covered with antientrapment grates as specified in the ANSI/APSP-16 performance standard or successor standard designated by the federal Consumer Product Safety Commission, that cannot be removed except with the use of tools. Slots or openings in the grates or similar protective devices shall be of a shape, area, and arrangement that would prevent physical entrapment and would not pose any suction hazard to bathers.

(c) Any backup safety system that an owner of a new swimming pool or spa may choose to install in addition to the requirements set forth in subdivisions (a) and (b) shall meet the standards as published in the document, "Guidelines for Entrapment Hazards: Making Pools and Spas Safer," Publication Number 363, March 2005, United States Consumer Product Safety Commission.

115928.5. Whenever a building permit is issued for the remodel or modification of an existing swimming pool, toddler pool, or spa, the permit shall require that the suction outlet or suction outlets of the existing swimming pool, toddler pool, or spa be upgraded so as to be equipped with antientrapment grates, as specified in the ANSI/APSP-16 performance standard or a successor standard designated by the federal Consumer Product Safety Commission.

301.5 Water Clarity. All swimming pool and spa water shall be maintained in a clear condition, which is free of algae, insects, debris, and in a sanitary condition. The floor of the pool shall be clearly visible.

301.6 Retroactivity. Subsection 301.4 shall not be enforced on a retroactive basis. Existing barriers required at the time of pool construction shall apply and be maintained.

Section 10-44.030 Interpretation

In the event of a conflict between the provisions of the Swimming Pool Safety Act, the International Swimming Pool and Spa Code, 2012 Edition, the 2013 California Building Code, or the 2013 California Residential Code, the Building Official shall implement the most restrictive measures cited.

SECTION 9. The City Council finds that this Ordinance is not subject to the California Environmental Quality Act (CEQA) pursuant to California Code of Regulations Title 14, Chapter 3, Sections 15060(c)(2) (the activity will not result in a direct or reasonably foreseeable indirect physical change in the environment) and 15060(c)(3) (the activity is not a project as defined in Section 15371), because it has no potential for resulting in physical change to the environment, directly or indirectly.

SECTION 10. If any section, subsection, subdivision, sentence, clause, phrase, or portion of this Ordinance is, for any reason, held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have adopted this Ordinance and each section, subsection, subdivision, sentence, clause, phrase, or portion thereof, irrespective of the fact that any one or more section, subsection, subdivision, sentence, clause, phrase, or portion thereof be declared invalid or unconstitutional.

SECTION 11. The City Clerk shall certify as to the adoption of this Ordinance and cause a summary thereof to be published within (15) days of the adoption and shall post a Certified copy of this Ordinance, including the vote for and against the same, in the Office of the City Clerk, in accordance with Government Code Section 36933.

PASSED, APPROVED, AND ADOPTED this 10TH DAY OF DECEMBER, 2013.

ANDREW BLOUNT, MAYOR

ATTEST:

PEGGY J. JOHNS, CITY CLERK

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF LAGUNA HILLS)

I, Peggy J. Johns, City Clerk of the City of Laguna Hills, California, DO HEREBY CERTIFY that the foregoing Ordinance No. 2013-3 was duly introduced and placed upon its first reading at a Regular Meeting of the City Council on the 12th day of November, 2013, and that thereafter, said Ordinance was duly adopted and passed at a Regular Meeting of the City Council held on the 10th day of December, 2013, by the following vote, to wit:

AYES:	Council Members Bressette, Carruth, Kogerman, Mayor Pro Tempore Gilbert, and Mayor Blount
NOES:	None
ABSENT:	None
ABSTAIN:	None

(SEAL)

PEGGY J. JOHNS, CITY CLERK

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss AFFIDAVIT OF POSTING
CITY OF LAGUNA HILLS) AND PUBLICATION

PEGGY J. JOHNS, being first duly sworn, deposes and says:

That she is the duly appointed and qualified City Clerk of the City of Laguna Hills;

That in compliance with State Laws of the State of California, ORDINANCE NO. 2013-3, being:

AN ORDINANCE OF THE CITY OF LAGUNA HILLS, CALIFORNIA AMENDING TITLE 10 OF THE LAGUNA HILLS MUNICIPAL CODE BY AMENDING CHAPTERS 10-28, 10-32, 10-36, 10-40, 10-48 AND 10-52 ADOPTING BY REFERENCE THE CALIFORNIA BUILDING STANDARDS CODE (CALIFORNIA CODE OF REGULATIONS, TITLE 24), CONSISTING OF THE CALIFORNIA BUILDING CODE (AS AMENDED), 2013 EDITION, BASED ON THE 2012 INTERNATIONAL BUILDING CODE AS PUBLISHED BY THE INTERNATIONAL CODE COUNCIL; THE CALIFORNIA MECHANICAL CODE, 2013 EDITION, BASED ON THE 2012 UNIFORM MECHANICAL CODE AS PUBLISHED BY THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS; THE CALIFORNIA ELECTRICAL CODE, 2013 EDITION, BASED ON THE 2011 NATIONAL ELECTRICAL CODE AS PUBLISHED BY THE NATIONAL FIRE PROTECTION ASSOCIATION; THE CALIFORNIA PLUMBING CODE, 2013 EDITION, BASED ON THE 2012 UNIFORM PLUMBING CODE AS PUBLISHED BY THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS; THE CALIFORNIA RESIDENTIAL CODE (AS AMENDED), 2013 EDITION, BASED ON THE 2012 INTERNATIONAL RESIDENTIAL CODE AS PUBLISHED BY THE INTERNATIONAL CODE COUNCIL; AND THE CALIFORNIA GREEN BUILDING STANDARDS CODE (AS AMENDED), 2013 EDITION; AND AMENDING TITLE 10, CHAPTER 10-44 OF THE LAGUNA HILLS MUNICIPAL CODE BY ADOPTING BY REFERENCE THE INTERNATIONAL SWIMMING POOL AND SPA CODE (AS AMENDED), 2012 EDITION, AS PUBLISHED BY THE INTERNATIONAL CODE COUNCIL

on the 15th day of November, 2013, was published in summary in The Register and on the 20th day of December 2013, was published in summary in the Saddleback Valley News; and was, in compliance with City Resolution No. 2004-05-25-2, on the 13th day of November, 2013, and on the 11th day of December, 2013, caused to be posted in summary in three places in the City of Laguna Hills, to wit:

Laguna Hills City Hall
Laguna Hills Community Center
Courtyard at La Paz Center

RK
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